



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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Ref: 8EPR-SR

ACTION MEMORANDUM AMENDMENT

SUBJECT: Action Memorandum Amendment for the Time-Critical Removal Action at the Libby Asbestos Site – Libby, Lincoln County, Montana.

FROM: Robert E. Roberts
Regional Administrator

TO: Thomas P. Dunne
Acting Assistant Administrator
Office of Solid Waste and Emergency Response

THROUGH: Michael B. Cook, Director
Office of Emergency and Remedial Response

Site ID#: BC
Category of Removal: Time Critical, NPL, EPA Fund-Lead

I. INTRODUCTION

The purpose of this Action Memorandum Amendment is to request and document Headquarters approval of a ceiling increase for the Libby Asbestos Site (Site) in Lincoln County, Montana. The scope of the Removal Action is unchanged. The previous Action Memorandum Amendment dated May 2, 2002 set forth the need and scope for additional cleanup activities at the Site. Those cleanup activities are progressing. However, the difficulty and expense of cleanup is greater than anticipated and additional removal ceiling is required to ensure cleanup continues as necessary. The Region 8 team continues to seek ways to ensure the cleanup is highly protective and cost effective.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

→ RI work
new exposures

new properties
differentiate old
vs. new

The initial Action Memorandum and subsequent Amendments provide basic descriptions of the vermiculite mine, vermiculite processing facilities, several contaminated properties, and

the conditions found throughout the Libby Valley. Since the date of the previous Action Memorandum Amendment (May 2002), the Site became final on the NPL in October 2002. Additional investigation has focused on evaluating conditions at individual residential and commercial properties throughout Libby as necessary to implement the response actions set forth in May 2002. While the total number of properties requiring remediation will remain uncertain until a Record of Decision is published, EPA R8 currently estimates that approximately 1400 residential/commercial properties will require remediation. Approximately 350 properties have been completed to date.

B. Other Actions to Date

The previous Action Memorandum Amendment provided a description of various activities at the Site and their progress as of May 2002. These activities were completed or continued as necessary and additional activities were started. For activities or locations that were NOT completed as of May 2002, an updated summary is found below:

PREVIOUS ACTIONS	
Location	Action Description and Updated Status
Export Plant	W.R. Grace demolished and disposed of four buildings on the property and removed approximately 17,500 cubic yards of contaminated soil and debris from the property. EPA completed remaining demolition work at the property of one building in 2002. The lumber business formerly operating at this location was relocated by EPA and Grace in 2003 to a new location in Libby. Work here is complete.
Screening Plant	This property consists of five distinct, contiguous parcels. (1) Raintree Nursery. EPA completed cleanup of this parcel in 2003. Approximately 17 acres were addressed and 250,000 cubic yards of contaminated debris and soil were removed. Restoration of this parcel is essentially complete, with only punch-list items remaining for early 2005. (2) North Side Parker Property. EPA completed cleanup here in 2004, addressing approximately four additional acres. (3) Flyway Property. EPA completed approximately ¼ of the cleanup of the Flyway parcel in 2002; W.R. Grace cleaned up the remainder of the parcel in 2004. In all, approximately sixteen acres were addressed and approximately 50,000 cubic yards of soil were removed. (4) KDC Bluffs Property. Several areas of the KDC Bluffs parcel were cleaned up by EPA in 2001; some lower level contamination remains which will be evaluated later. (5) Wise Property. Small property between Raintree Nursery and the Flyway that still requires cleanup. The only extensive removal work remaining consists of the Wise property and some right of way along Highway 37 near the Flyway. This work is scheduled to occur in 2005.

Rainy Creek Road	Forest service access road to the former vermiculite mine. Highly contaminated. Site access remains restricted. Nearly half the road was paved and semi-permanent decon stations were installed to facilitate soil disposal at the former mine. Soil disposal is ongoing.
Libby High School and Middle School Tracks	Both tracks were restored in 2003. Work is complete.
Siefke Property	Highly contaminated, large residential property identified early. Cleanup was completed in 2002 and restoration was completed in 2004.
Johnson, Sanderson, Temple, Struck, Rice, Fuhlendorf, Spencer, and Westfall properties.	Highly contaminated residential properties identified early. All cleanup and restoration was completed by 2003.
Champion Haul Road	Cleanup was completed in 2003.
NEW ACTIONS	
Location	Action Description and Updated Status
Riverside Park and Boat Ramp	Subsurface contamination was encountered and spread during construction of a new park and boat ramp by the City of Libby in 2003. The parcel is contiguous to the former screening plant. EPA halted construction and cleaned the parcel in late 2003. Approximately 15 acres of soil were excavated to an average depth of two feet. Cleanup and restoration is complete.
Lincoln County Landfill Asbestos Cell	EPA constructed and operates a new cell at the Lincoln County Landfill that is used for disposal of vermiculite insulation and other construction debris. Construction of the cell was completed in 2003. The cell was expanded in 2004. Disposal operations are ongoing.
Burlington Northern Santa Fe Railyard	BNSF began cleanup of the contaminated rail yard in 2003 but had to cease work due to complexities with soil removal below the tracks. Work began again in 2004, most tracks were removed, and work is now complete. Most contaminated soils were removed, but some contaminated was capped in place.
Former Stimson Lumber Mill	EPA conducted extensive sampling of the former lumber mill and has identified two primary areas requiring cleanup. The first of these, the former central maintenance building, is scheduled to be cleaned up in 2005. The second, a former nursery area, is to be further investigated in 2005 and will likely be cleaned up in 2006.

Systematic screening and cleanup of individual residential and commercial properties in Libby Valley	As the first phase of the Remedial Investigation (RI), and to gather the information required to make decisions on which properties require emergency response action, EPA inspected and sampled over 3400 properties in 2002, 2003, and 2004. Most inspection is complete, though additional RI sampling is planned for 2005. At this point, we estimate approximately 1400 properties will require cleanup, 500-700 of which will be conducted under emergency response. The remainder will be cleaned up using remedial action authority. As of December, 2004, 350 emergency properties have been cleaned up. Work is ongoing.
Troy, MT	Nearby smaller town suspected of containing similar contamination to Libby, although generally smaller in scope. The Montana Department of Environmental Quality and EPA have signed a cooperative agreement which calls for MDEQ to conduct screening of individual properties in 2006. Background work will begin in 2005.

C. Current Actions

EPA is continuing systematic investigation and cleanup of individual properties throughout the Libby valley as described in the May 2002 Action Memorandum Amendment. Approximately 350 properties have been completed and an additional 170 are scheduled for 2005. Additionally, EPA is conducting sampling and other research (the Remedial Investigation) to better understand and quantify the risks present in Libby as well as evaluating the efficacy of current cleanup approaches. EPA expects to publish a Record of Decision (ROD) in late 2005 or early 2006. The ROD will provide more definitive action levels and a more accurate count of the total number of properties requiring cleanup. Cleanup will switch to remedial action authority upon publication of the ROD.

Handwritten notes:
 RI/FS → ROD
 may do it rect criteria → Expand RI
 how do you say that?

D. State, Local, and Other Authorities Roles

There are no significant changes in roles from the May 2002 Amendment, other than MDEQ assuming the lead role in investigation and screening of Troy, MT.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Handwritten note: NCP criteria

Other than properties that have been cleaned up, site conditions in Libby still present significant threats to public health. In fact, ongoing investigation has shown the number of properties requiring cleanup is somewhat higher than originally anticipated.

IV. ENDANGERMENT DETERMINATION

The actual or threatened releases from this Site, if not addressed by continuing to implement the response actions set forth in the original Action Memorandum and subsequent

Expand

Amendments, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

Consistency?

The original Libby Action Memorandum dated May 23, 2002 provided the documentation required to meet the NCP Section 300.415(b)(2) criteria for a Removal Action and the CERCLA Section 104(c) emergency exemption from the \$2 million and one year limits on Removal Response Actions. The most recent Action Memorandum Amendment dated May 2002 expanded the scope of removal actions and raised the approved removal ceiling to \$55,635,000. The conditions necessitating removal actions and the emergency exemption have not changed. However, the difficulty and costs of mitigating these conditions have proven higher than originally estimated. Region 8 is requesting an additional increase to the removal ceiling in order to continue and complete work approved in the May 2002 Amendment.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Action Description

The Action Memorandum Amendment dated May 2002 set forth the proposed actions. Other than increased numbers of properties likely requiring cleanup, and increased difficulties of conducting the actions, the scope has not changed.

B. Contribution to remedial performance

The Site was made final on the NPL in October 2002. While cleanup at the Site continues to be conducted using removal authority, the Site was transitioned to the Region 8 Remedial Program in directly after final listing on the NPL. Collection of information and data necessary to perform an RI, and ultimately to write a Record of Decision, is occurring concurrently with the conduct of the removal actions. Information and experience gained during the removal actions is used to continually refine the process and to plan for future work. Likewise, as more information is learned about the nature of the contamination and the risks presented, adjustments to the cleanup approach are made as necessary. Wherever possible, effort is made to focus on the most contaminated properties first and also to ensure that properties are cleaned to a sufficient level such that cleanup must occur only once. This approach is protective as well as cost effective. It is expected that remedial measures will be similar in scope to removal action being conducted now.

C. Description of alternative technologies

EPA attempts to employ the most appropriate technologies for addressing risks, but there are no known alternative technologies available at this time for addressing asbestos. Cleanup occurs through the systematic use of several existing technologies, including removal, containment, and encapsulation. Wherever necessary and possible, EPA considers unique

applications of these technologies to meet site-specific cleanup objectives.

D. EE/CA

No EE/CA is required.

E. Applicable or relevant and appropriate requirements

See the Federal and State ARARs identified and/or discussed in the original Action Memorandum dated May 23, 2000.

F. Project Schedule

RI

The total number of properties requiring cleaned up will not be known until publication of a ROD, expected in late 2005 or early 2006. Based on current knowledge, EPA estimates that approximately 1400 properties will require cleanup, of which 350 have already been addressed. While a large percentage of remaining properties will meet the conditions set forth in the May 2002 Action Memo Amendment for emergency response, emergency response cleanup using removal authority will continue only until publication of a ROD, at which time cleanup will continue using remedial authority. Whether using removal or remedial authority, it is expected that approximately 170-200 properties can be cleaned up per year at current funding levels. The overall project schedule is contingent upon funding and the total number of properties requiring cleanup, but based on current knowledge, the current funding situation, and the proposed date of a ROD, EPA estimates that approximately 1-2 years of emergency response and 4-6 years of remedial response remain. Pending approval of this Amendment, work is scheduled to begin again in February 2005.

G. Estimated Costs

The ceiling increase is projected to cover two years of additional removal actions at production rates similar to those in 2003 and 2004 (170-200 properties expected to be cleaned per year). While the scope of cleanup has not changed, the May 2002 Action Memorandum Amendment significantly underestimated the average cleanup cost per property, did not accurately account for disposal costs, and underestimated the number of properties requiring cleanup. Because of this, EPA R8 has reached the removal ceiling quicker than anticipated and the job is not complete. However, after two years of investigation and cleanup, R8 is able to more accurately forecast cleanup requirements, both on a per property basis and overall. Because of this increased accuracy, and for simplicity, this Amendment provides only a basic, cumulative breakout of existing and proposed removal ceilings (Table 1), as well as a summary of other external costs that have been incurred that do not count against the removal ceiling (Table 2). Again, it is expected a Record of Decision will be published within two years, and cleanup will switch to remedial authority as necessary.

Table 1. Proposed Site Ceiling

Category	Current Ceiling (Action Memo Amendment dated May 2, 2002)	Proposed Ceiling Increase	Proposed Total
Extramural Costs	\$45,525,000	\$30,000,000	\$75,525,000
Contingency @ 20% of Extramural	\$9,100,000	\$6,000,000	\$15,100,000
Intramural Costs	\$960,000	\$100,000	\$1,060,000
TOTAL	\$55,635,000	\$36,100,000	\$91,735,000

Table 2. Other major expenditures not counted against ceiling. Note that amounts are approximate.

Task	Previous Expenditures Through CY 2004 (approximate)	Planned Expenditures CY 2005-2006 (approximate)
Phase I and Phase II Removal Sampling Investigations	\$8,100,000	0
Medical Screening Support	\$500,000	0
Contaminant Screening Study (first phase of Remedial Investigation)	\$5,000,000	\$500,000
Remedial Investigation & Risk Assessment	\$2,500,000	\$2,000,000
Performance Evaluation/ Analytical Methods Study	\$1,000,000	\$500,000
USGS Support	\$2,000,000	0
Community Involvement	\$500,000	\$500,000
Database Creation and Management	\$2,000,000	\$1,500,000
TOTAL	\$21,600,000.00	\$5,000,000.00

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed action will result in continued public exposure to unsafe amounts of amphibole asbestos. This will increase the risk to public health and continue to burden an already impacted community.

VIII. OUTSTANDING POLICY ISSUES

Because there is no change in scope, there are no new policy issues or considerations.

IX. ENFORCEMENT

Attachment 1 is a confidential summary of Enforcement Actions.

X. RECOMMENDATION

This decision document represents the selected Removal Action for the removal of asbestos sources from targeted homes, businesses, and public buildings at the Libby Asbestos Site in Lincoln County, Montana. The proposed removal actions have been developed in accordance with CERCLA as amended and are consistent with the NCP. The decision is based on the Administrative Record for the Site.

Conditions at the Site meet the NCP [40 CFR § 300.415(b)] criteria for a Removal Action, and the NCP [40 CFR § 300.415(b)(5)(ii)] criteria for an exemption from the statutory limits. I recommend your approval of the proposed removal action ceiling increase.

Approve: _____ Date: _____

Thomas P. Dunne
Acting Assistant Administrator
Office of Solid Waste and Emergency Response

Disapprove: _____ Date: _____

Thomas P. Dunne
Acting Assistant Administrator
Office of Solid Waste and Emergency Response

